

What is claimed is:

1. A routing apparatus for guaranteeing Quality of Service (QoS) in the Internet, comprising:

5 a QoS edge routing means at a transmitter for receiving a request for allocating resource from a transmitting node, setting a first path at a QoS data rate by signaling for setting a path and transferring data at the QoS data rate through the first path by receiving a  
10 request for transferring data from the transmitting node;

at least one QoS core routing means for receiving a request for allocating resource from the QoS edge routing means at a transmitter, setting a second path at a QoS data rate by signaling for setting a path and transferring data  
15 at the QoS data rate through the second path by receiving a request for transferring data from the QoS edge routing means at a transmitter; and

a QoS edge routing means at a receiver for receiving a request for allocating resource from the QoS core routing  
20 means, setting a first path at a QoS data rate by signaling for setting a path and transferring data at the QoS data rate through the first path by receiving a request for transferring data from the QoS core routing means.

25 2. The routing apparatus as recited in the claim 1, wherein the QoS edge routing means monitors whether a quantity of data transferred from the transmitting node is

smaller than the allocated resource.

3. A routing method for guaranteeing Quality of Service (QoS) in the Internet, comprising the steps of:

5       a) receiving a request for allocating resource from a transmitting node and setting a path to a receiving node at a QoS data rate by signaling of each router, a QoS edge router at a transmitter, a QoS core router and a QoS edge router at a receiver, for setting a path; and

10      b) receiving a request for transferring data from the transmitting node and transferring data at the QoS data rate to the receiving node through the resource path reserved by the QoS edge router at the transmitter, the QoS core router and the edge router at the receiver.

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4. A computer readable recording medium implemented in a high capacity microprocessor included in a routing apparatus for guaranteeing Quality of Service (QoS) in the Internet, comprising the functions of:

20      a) receiving a request for allocating resource from a transmitting node and setting a path to a receiving node at a QoS data rate by signaling of each router, a QoS edge router at a transmitter, a QoS core router and a QoS edge router at a receiver, for setting a path; and

25      b) receiving a request for transferring data from the transmitting node and transferring data at the QoS data rate to the receiving node through the resource path

reserved by the QoS edge router at the transmitter, the QoS core router and the edge router at the receiver.